

**TAMIL NADU TRANSMISSION CORPORATION LIMITED**

**ABSTRACT**

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TANTRANSCO - Replacement of failed 10 MVA, 110/33 kV power transformer by a healthy 10 MVA, 110/33 kV power transformer and ratification for having replaced the failed power transformer at Koppampatty 110/33 -11 kV SS in Trichy Operation Circle (Trichy EDC/Metro) of Trichy Region – Administrative approval – Accorded  
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**TECHNICAL BRANCH**

(Per) CH TANTRANSCO Proceedings No.167

Dated:24.09.2025  
Visuvaavasu Varudam  
Purataasi - 08  
Thiruvalluvar Aandu 2056

**READ:** Chairman's approval dated 23.09.2025

**PROCEEDINGS:**

1. The Tamil Nadu Transmission Corporation Limited hereby approves the proposal for replacement of the failed 10 MVA, 110/33 kV power transformer with a healthy unit of same capacity in anticipation of approval at the existing Koppampatty 110/33-11 kV SS in Trichy Operation circle (Trichy EDC/Metro) of Trichy Region at an estimated cost of Rs.118.66 lakhs Gross and Rs.(-)39.16 lakhs Nett. The detailed estimate and report are annexed to these proceedings.
2. The expenditure is chargeable to TANTRANSCO - Funds - Capital Expenditure – Trichy Operation Circle (Trichy EDC/Metro) - A/C code No: 1020400.
3. By virtue of the provisions contained in sub-section (2) (a) of section 185 of the Electricity Act, 2003, TANTRANSCO being the Transmission utility, Licensee and successor entity of Tamil Nadu Electricity Board will exercise the powers of the Telegraph Authority under the provisions of section 164 of the Electricity Act, 2003, which have already been conferred upon the Board under section 51 of the Indian Electricity Act, 1910.

// BY ORDER OF THE CHAIRMAN//

K.SRIDHARAN

CHIEF ENGINEER/TRANSMISSION(FAC)

Encl: Report and detailed estimate

To

The Chief Engineer/Distribution/Trichy Region

(Per) CH TANTRANSCO Proceedings No.167, dated : 24.09.2025

Copy to:

The Managing Director/TANTRANSCO/Chennai-2

The Director/Distribution/TNPDCL/Chennai-2

The Director/Transmission Projects/TANTRANSCO/Chennai-2

The Director Operation/TANTRANSCO/Chennai-2

The Director/Finance/TANTRANSCO/Chennai-2

The Chief Engineer/Transmission Projects/ Trichy

The Chief Engineer/System Operation/ Trichy

The Superintending Engineer/Operation/ Trichy

The Superintending Engineer/ Trichy Metro EDC

The Superintending Engineer/GCC/Trichy

The Superintending Engineer/Transmission -I/Chennai -2

The Superintending Engineer/Transmission -II/Chennai -2

The Superintending Engineer/System Studies/Chennai -2

The Resident Audit Officer (AGO'S Unit)/Chennai -2

B.P.Section (Administrative Branch)

Stock file

//FORWARDED BY ORDER//

*J. K. Srinivasan*  
24/09/2025

EXECUTIVE ENGINEER/MASTER PLAN II

Enclosure to (Per) CH TANTRANSCO Proceedings No.167, dated : 24.09.2025

### **REPORT TO ACCOMPANY THE ESTIMATE**

This proposal envisages replacement of the failed 10 MVA, 110/33 kV power transformer with a healthy unit of same capacity in anticipation of approval at the existing Koppampatty 110/33-11 kV SS in Trichy Operation circle (Trichy EDC/Metro) of Trichy Region at an estimated cost of Rs.118.66 lakhs Gross and Rs.(-)39.16 lakhs Nett.

#### **Need:**

At present Koppampatty 110/33-11 kV SS is having 1x10 MVA, 110/33 kV and 1x10+1x16 MVA, 110/11 kV Power Transformers. The 10 MVA,110/33 kV VEI make power transformer bearing serial No.VEI/10M/05 was in service at Koppampatty 110/33-11 kV SS from 11.04.2013.

On 04.06.2021 at 21.00 hrs., the existing 110 kV GC breaker and LV III, LV II & LV I breakers got tripped due actuation of master relay alongwith Buchholz alarm and trip and winding alarm and trip. The power transformer caught fire due to direct lightning stroke. The test results conducted by MRT wing were found satisfactory and the 110/11 kV power transformers I & II were charged on 05.06.2021 at 03.30 hrs. and the substation loads were normalized.The above failed 10 MVA, 110/33 kV power transformer was isolated from service.

The above 10 MVA, 110/33 kV power transformer feeds 2 Nos 33/11 kV substations namely T.Renganathapuram SS and T.Murungapatty SS. Back feeding arrangements were made to T.Renganathapuram 33/11 kV SS from Thuraiyur 110/22-11 kV SS and for T.Murungapatty 33/11 kV SS from 11 kV feeders of Koppampatty 110/33-11 kV SS.

On 05.06.2021, the power transformer was inspected by GCC wing and found that the transformer was completely burnt. Hence, the power transformer was recommended for condemnation.

In order to normalize the supply, the failed unit was replaced by another healthy VEI make power transformer bearing Sl.No.VEI/10M/92 of same capacity on 13.06.2021. Hence, this proposal has been evolved to regularize the replacement made already.

**Details of works:**

- Erection of 1 No. healthy 10 MVA power transformer at the existing Koppampatty 110/33-11 kV SS.
- Dismantling of failed 1 No. 10 MVA power transformer at the existing Koppampatty 110/33-11 kV SS.

*J. Venkatesh*  
*24/09/2025*  
EXECUTIVE ENGINEER/MASTER PLAN II

**DETAILED ESTIMATE FOR REPLACEMENT OF FAILED 10 MVA, 110/33 KV POWER TRANSFORMER BY HEALTHY 10 MVA, 110/33 KV POWER TRANSFORMER AT KOPPAMPATTY 110/33-11 KV SS IN TRICHY OPERATION CIRCLE (TRICHY METRO EDC)**

**Part I : New Asset Chargeable to Capital**

Rs.in Lakhs

SL NO	DESCRIPTION	QTY	RATE in Lakhs	PER	AMOUNT in Lakhs
1	10 MVA, 110/33 KV Power Transformer(rate as per PO.TR.3106/2021)	1 No.	102.760	E	102.760
2	Cost of materials				102.760
3	Labour and Transport including GST nad ESI			Borne by the company	-
4	Sub total				102.760
5	Estt & supervision charges @ 15 %				15.414
6	Dismantling charges			Actual charges	0.490
7	<b>Gross</b>				<b>118.66</b>
8	Less credit				157.82
9	<b>Nett</b>				<b>-39.16</b>

**Part I (a) : Dismantling Charges**

**0.489**

**PART II Accumulated depreciation charges**

SL. No.	DESCRIPTION	Original cost	Full Life Period	Useful Life Period in	Accum. depre.
1	10 MVA, 110/33 KV Power Transformer	157.82	25	14	79.542
					<b>79.542</b>

**Part III : Devolution of old equipment to store**

Part III:Part IV - Part II = 157.82 - 79.54 = **78.28 lakhs**

**Part IV : Removal of old assets Charges**

SL. NO	Name of the item	Original Cost	Original Erection Charges 10%	Original Centages 15%	Original Cost of Asset
1	10 MVA, 110/33 KV Power Transformer (rate as per PO.TR.1516/2006)	124.760	12.48	20.59	157.821
	<b>Total</b>				<b>157.82</b>

**ABSTRACT**

Part I : New Asset Chargeable to Capital

Rs in Lakhs

**118.66 Gross**

**-39.16 Nett**

Part I (a) : Dismantling Charges

**0.489**

Part II : Accumulated Depreciation Charges

**79.54**

Part III:Devolution of old equipment to store

**78.28**

Part IV : Removal of old assets Charges

**157.82**

*[Signature]*  
24/09/2025  
Executive Engineer/Master Plan II